Ship)

 $\chi\chi V$ 9. (Amended) The method according to claim 1 wherein sensitization of the sensing surface comprises immobilizing an analyte-specific ligand to the sensing surface.

N3

H

of the first sensitizing fluid or the second sensitizing fluid is an analyte-specific ligand.

16. (Amended) The method according to claim 11 wherein at least the ligand of the first sensitizing fluid or the second sensitizing fluid is a bi-functional ligand.

17. (Amended) A sensitized sensing surface made according to the method of claim 1.

18. (Amended) A method of analyzing a fluid sample for an analyte, comprising sensitizing a discrete sensing area on a sensing surface by the method according to claim 1, contacting the sensing area with the fluid sample, and detecting interaction between the analyte and the sensing area.

39. (Amended) A sensor system, comprising a sensor device according to claim 31 and further comprising:

means for applying laminar fluid flows through the inlet openings, such that the laminar fluid flows pass side by side through the flow cell over the sensing surface;

means for varying the relative flow rates of the laminar flows of fluids to vary the respective lateral extensions of the laminar flows over the sensing surface; and

detection means for detecting interaction events on the sensing surface.

43. (Amended) A method of synthesizing compounds, comprising sensitizing a discrete sensing area on a sensing surface by the method according to claim 1, wherein such sensitization constitutes the successive addition of chemical moieties to achieve compound synthesis.